PROJECT/ACTIVITY TITLE: Supplemental		
Environmental Projects: Increased Stormwater		
Sampling and Monitoring in and Around Los		
Alamos National Laboratory		

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PURPOSE: Compliance with the 2016 Settlement Agreement between New Mexico Environment Department (NMED) and the Department of Energy (DOE) that stipulated the identification and completion of Supplemental Environmental Projects (SEPs) at Los Alamos National Laboratory (LANL). Increased stormwater sampling and monitoring in and around LANL is one of the identified SEPs categories; The sampling and monitoring SEP is designed to fill data gaps to characterize the sources of pollutants in storm water runoff and impacts on receiving waters in and around LANL. Once completed the data will lead to a better understanding of sources and potential impacts.

**Location**: Various locations within LANL, Bandelier National Monument and Santa Fe National Forest

**Project Contact**: Terrill Lemke, EPC-EC, (505) 665-2397 and Jaime Navarro, NA-LA, 505-667-1517.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COVERAGE: 2008 Final Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory, Los Alamos, New Mexico (DOE/EIS-380) and associated Records of Decisions (RODs).

### **DESCRIPTION OF PROPOSED ACTION**

The Proposed Action in and Around Los Alamos National Laboratory includes the following sampling and monitoring activities:

- Reference Watershed Sampling and Monitoring: Data collected in reference watersheds will characterize the concentrations of constituents attributable to natural background and atmospheric deposition sources found on the Pajarito Plateau and applicable to LANL waters. The data will be used as reference when evaluating storm water quality from watersheds with similar characteristics on the Pajarito Plateau. The data collected will augment existing background data sets collected by the LANL and the NMED at other locations on the Pajarito Plateau. Ultimately collecting reference watershed data will allow for NMED and DOE to better evaluate LANL impacts to storm water quality.
- LANL Developed-Area Sampling and Monitoring: Storm water runoff and sediment that originate from buildings, roads, vehicles, and other structures or activities associated with a developed landscape will be monitored from various LANL locations. This study will generate storm water quality and discharge, precipitation, sediment, and vehicular use data to aid in characterizing and quantifying the impacts to water and sediments from developed areas not impacted by regulated industrial activities.

<sup>&</sup>lt;sup>1</sup> Settlement Agreement Number HWB-14-20 (agreement). This is the agreement between the Hazardous Waste Bureau of the New Mexico Environmental Department and the U.S. Department of Energy and Los Alamos National Security, LLC. The agreement settles and completely resolves the alleged violations contained in the December 6, 2014 Los Alamos National Laboratory Order, and any future claims, penalties, fines, liabilities or other sanctions against the Respondents and their officers, directors, employees, agents, constituent agencies, contractors, subsidiaries, successors, assigns, trustees, receivers, and other affiliates arising from or related to the February 14, 2014 incident at the Waste Isolation Pilot Plant. The agreement may be assessed at <a href="https://www.env.nm.gov/OOTS/documents/LANLSASFOFINALL">https://www.env.nm.gov/OOTS/documents/LANLSASFOFINALL</a> 22 16.pdf.

- LANL Firing Sites Sampling and Monitoring: LANL has performed detonation testing at open-air firing-sites and occasionally has burned explosives wastes to consume high explosives. In the past, some of these sites have not been sampled by any other program; these are the sites that will be characterized, provided there is enough rainfall to provide a stormwater sample during the SEP project timeframe, as a result of the Proposed Action.
- Aquatic Life Surveys: Ambient water quality criteria (AWQC) for aquatic life apply to all storm water runoff in and around LANL facilities based upon the designation of the reach in the New Mexico Administrative Code. However, the current standards used to determine the AWQC are based on species present in perennial waters largely in the eastern United States. Evaluation and determination of the species resident to reaches in and around LANL facility have not occurred. Appropriate accounting for aquatic species resident to waters on and around LANL facility will enable DOE and NMED to evaluate whether updates to New Mexico aquatic life criteria for storm water are necessary. The study areas will generate biological data to aid in characterizing storm water-affected aquatic life communities found in perennial, intermittent, and ephemeral waters in the vicinity of LANL facilities and ultimately enable DOE and NMED to evaluate whether updates to state aquatic life criteria for storm water are necessary to protect native species. The study is to identify aquatic organisms present in ephemeral, intermittent and perennial streams across several locations on the Pajarito Plateau. Surveys are designed to observe and identify fish and amphibians and to collect benthic macroinvertebrates (visible to the naked, eye such as aquatic snails, aquatic worms, and the aquatic larvae of winged insects), and meiofauna (microscopic invertebrates). Fish and amphibians would be captured and released after identification. Benthic macroinvertebrates and meiofauna samples would be sent to a taxonomic laboratory for identification.

### **IMPACT ASSESSMENT**

See Table 1 below for an assessment of potential impacts.

Research activities conducted off LANL lands will be or have been approved by the governing land management agency either Bandelier National Monument or the Santa Fe National Forest.

**Table 1. Environmental Factors Checklist** 

<b>Environmental Factor</b>	Analysis
Land Use	No change to current conditions.
Visual	No change to current conditions.
Geology and Soils (geologic hazards, soil productivity, capability, erodibility, and mass failure)	No change to current conditions.
Water (surface and groundwater quality and quantity, groundwater recharge, streamflow regimes)	Temporary and very minor potential increase in turbidity during aquatic life surveys.
Non - radiological Air Quality	N/A
Radiological Air Quality	N/A

Environmental Factor	Analysis
Noise	No change to current conditions.
Ecological (floodplains, wetlands, threatened or endangered species and habitat, migratory birds, exotic organisms)	Aquatic life surveys will use catch and release methods for fish and amphibian collections; no adverse impact is expected. There would be a very small collection of benthic and meiofauna that will not affect population viability. No impact to species listed under the Endangered Species Act nor floodplains or wetlands.
Human Health – Radiological Impacts on the Public	N/A
Human Health – Chemical Impacts on the Public	N/A
Human Health - Worker Health	Potential release sites (PRSs) are present within some project work areas.  Based on the scope of work there should be no impacts to the PRSs, and there should be no PRS issues or requirements. The work will be implemented by LANL Environment, Safety, and Health (ADESH) staff and subcontractors in accordance with applicable ADESH and LANL requirements.
Cultural Resources (archeological and historical)	No effect.
Socioeconomics	No change to current conditions.
Infrastructure (roads, utility corridors, communications systems, energy & fuels, distribution systems, and water)	No change to current conditions. All sites are accessible by foot.
Waste Management	Precautions will be in place to ensure that equipment and supplies used for the project do not carry contamination from PRSs to areas outside of PRSs.
Transportation	No impact to transportation. All sites are accessible by foot.
Environmental Justice	N/A
Facility Accidents	N/A

Other SEPs are under consideration as independent actions. No SEP is dependent on the completion of any other SEP. All SEPs have either undergone a separate NEPA review or are not yet ripe for a detailed NEPA analysis. Each SEPs that has undergone analysis has been reviewed in consideration of connected and cumulative actions that could have individually insignificant but cumulatively significant impacts. No cumulative and significant impacts have been identified. It is important to note that SEPs are designed to decrease long-term environmental impacts.

#### CONCLUSION

Based on this NEPA determination analysis, there are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects or threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders. Consequently, no further NEPA analysis is necessary or required.

### **NEPA Determination**

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action as described herein, falls within the boundaries of activities previously analyzed in the 2008 Final Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory and associated RODs. No additional NEPA analysis is required. If changes are made to the scope of the action so that it is no longer bounded by the enclosed description, or the project is changed to encompass other actions, NEPA requirements for the action will need to be reassessed at that time and further analysis may be required.

NA-LA NEPA Compliance Officer: Jane Summerson

Signature:

Date:

3/18-/18